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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-----------------|----------------------|---------------------|------------------|--|
| 09/944,627 | 08/31/2001 | Peiguang Zhou | KCC-17,049 | 9253 | |
| 7590 06/01/2004 | | | EXAMINER | | |
| | POWERS, LEAVITT | JACKSON, MONIQUE R | | | |
| ONE METROPOLITAN SQUARE, 16TH FLOOR ST. LOUIS, MO 63102 | | | ART UNIT | PAPER NUMBER | |
| | | | 1773 | | |

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | | Application No. | | Applicant(s) | | | |
|--|--|---|---|---|--|--|--|
| | | 09/944,627 | | ZHOU, PEIGUANG | | | |
| | | Examiner | | Art Unit | | | |
| | | Monique R Jackson | | 1773 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | |
| THE - Exte after - If the - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1. SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, howev y within the statutory minin will apply and will expire S , cause the application to | er, may a reply be tim num of thirty (30) days IX (6) MONTHS from to become ABANDONE | ely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | |
| Status | | | | | | | |
| 1) 又 | Responsive to communication(s) filed on 17 O | ctober 2003. | | | | | |
| · | This action is FINAL . 2b) ☐ This action is non-final. | | | | | | |
| 3) | ·— | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| 5)□ 6)⊠ 7)□ | 4) ☐ Claim(s) 1-10 and 12-65 is/are pending in the application. 4a) Of the above claim(s) 15-65 is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-10 and 12-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | ion Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | r. | | | | | |
| 10) | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | |
| a)l | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau See the attached detailed Office action for a list | s have been receiv s have been receiv rity documents hav u (PCT Rule 17.2(a | /ed. /ed in Application /e been receive (a)). | on No d in this National Stage | | | |
| Attachmen | t(s) | | | \$ | | | |
| 1) Notic | e of References Cited (PTO-892) | 4) 🔲 Ir | nterview Summary (| PTO-413) | | | |
| 2) 🔲 Notic 3) 🔯 Inforr | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 13. | 5) <u> </u> | aper No(s)/Mail Da | | | | |

DETAILED ACTION

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1. In response to applicant's telephone inquiry regarding the last Office action, the following corrective action is taken.

The period for reply of three (3) MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.

- 2. A corrected copy of the last Office Action is enclosed and supersedes the prior office action mailed 1/26/04.
- 3. The amendment filed 10/17/03 has been entered. Claim 11 has been cancelled. Claims 1-10 and 12-65 are pending in the application. Claims 15-65 have been withdrawn.
- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1, 4-7, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-081470A (JP'470) for the reasons recited in the prior office action and restated below.

JP'470 teaches an adhesive composition comprising 5-70wt% hydrogenated styreneisoprene-styrene or styrene-butadiene-styrene block copolymer, and 1-75wt% of crystalline

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isotactic polypropylene, which inherently has a crystallinity within the instantly claimed range, and having a number-average molecular weight of 20,000 (Abstract.)

7. Claims 1-5, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Mori (USPN 6,248,834.) Mori teaches a thermoplastic elastomer composition comprising 100 parts by weight of chlorinated crystalline polyethylene such as HDPE, 5 to 1000 parts by weight of a crystalline polyolefin and from 20 to 1500 parts by weight of a rubber component, wherein the crystalline polyolefin may be polyethylene homopolymer or polypropylene homopolymer which inherently has a crystallinity within the instantly claimed range and wherein crystalline polypropylene homopolymer is inherently either syndiotactic or isotactic; and wherein the rubber may be a hydrogenated styrene type rubber which is formed by hydrogenating a block copolymer of styrene and a conjugated diene such as butadiene or isoprene (Abstract; Col. 2-4.)

Claim Rejections - 35 USC § 103

8. Claims 6-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori. The teachings of Mori are discussed above. Mori does not specifically teach the number average molecular weight of the crystalline polyolefin or the melt index of the composition. However, Mori does teach that the molecular weight of the chlorinated crystalline polyethylene is a result-effective variable affecting the melt viscosity and mechanical properties of the composition and further teaches that the crystalline polyolefin and the hydrogenated styrene rubber both usually have a melt flow rate within the range of from 0.01 to 100 g/10minutes wherein the Examiner notes that the melt flow rate is directly related to molecular weight (Col. 2, lines 10-24; Col. 3, lines 16-21 and lines 55-64.) Mori further teaches that the composition may include additives such as softening agents to improve the moldability of the composition or may include other

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additives or fillers (Col. 3, line 65-Col. 4, 24; Col. 6, lines 1-5.) Therefore, considering the melt index of the adhesive composition is a result-effective variable affecting the ability of the composition to flow under temperature, one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation to determine the optimum molecular weight of the components and/or additive or filler content to provide a desired melt index of the composition taught by Mori for a particular end use. Further, with regards to Claim 13, as the Examiner noted above, crystalline polypropylene is either syndiotactic or isotactic and hence one having ordinary skill in the art would have been motivated to utilize either type of polypropylene as the crystalline polyolefin in the invention taught by Mori.

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Response to Arguments

9. Applicant's arguments filed 10/17/03 have been fully considered but they are not persuasive with respect to JP'470. The Applicant argues that the JP'470 reference does not teach the instantly claimed invention with sufficient specificity referring to MPEP 2131.03 which recites:

"When the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. If the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. The unexpected results may also render the claims unobvious. The question of "sufficient specificity" is similar to that of "clearly envisaging" a species from a generic teaching."

However, the Examiner notes that though JP'470 does not teach a specific example at 70wt%, as stated by the Applicant in their arguments, JP'470 clearly teaches why 70wt% is a selected endpoint in that amounts over 70wt% may not only reduce the adhesive strength of the

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composition but also adversely affect the fluidity of the adhesive when heated and melted which is undesirable. Therefore, considering the Applicant has provided no showing of unexpected results with regards to values greater than 70wt% to about 90wt%, and considering the instant claims recite "about 70%", the Examiner believes that JP'470 has provided sufficient specificity for selecting 70wt% which reads upon the instantly claimed limitation of "between about 70% and 90%".

- 10. Applicant's arguments, see pages 16-23, filed 10/17/03, with respect to Finerman et al, WO 98/37144, and Shibuya et al have been fully considered and are persuasive. The rejections cited in paragraphs 5-9 of the office action mailed 7/17/03 have been withdrawn.
- 11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Monique R. Jackson Primary Examiner

Technology Center 1700

May 17, 2004